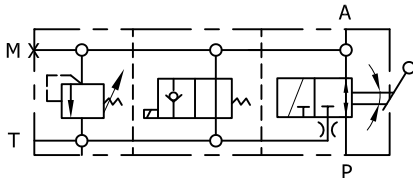


Hydraulic Symbol



Specifications

Discharge	: Manual and Electric
Solenoid valve	
Power voltage	: 24VDC / 110 VDC / 220VDC 24VAC / 110 VAC / 220VAC
Power consumption	: 26W
Protection	: IP65 in compliance with DIN 40050 connector in compliance with DIN 43650 type A 2 poles + earthing with AC voltage; internal connector has bridge rectifier
Body material	: Phosphated Carbon Steel Nickle Coated Carbon Steel Stainless Steel
Valve material	: Phosphated Carbon Steel
Seals	: Nitrile / Viton / Butyl / EPDM Low temperature nitrile Hydrogenated nitrile

Description

The Safety Block is one compact unit comprising of all the components required for easy assembly and dismantling the accumulator during servicing.

A relief valve is installed for safety of the pressure line. It is recommended to use a safety block per accumulator. The principle of operation (shut-off) is based on a working principle of that of the ball valve. Each safety block is provided with a port for the pressure line coming from the pump, a port to connect the accumulator, a port for the drain and a port to connect a pressure gauge or for remotely monitoring the pressure.

These safety blocks should not be used as flow control valves by placing the handle in the intermittent position and shall be used only in the extreme position (fully open or fully shut).

Technical Data

Nominal flow rates @ 6m/s:	B10= 30 lpm B20=115 lpm B25=180 lpm B32=290 lpm
Shut-off valve	: Ball type
Diameter of inlet port	: 10, 20, 25, 32 mm
Relief valve Port Dia	: 10 mm
Set pressure	: 5 to 420 bar.
Max. Pressure (PS)	: 420 Bar.
Test Pressure (PT)	: 1.43 x PS
Temperature range	: -40°C to +150°C (+65°C with solenoid valve).
Fluid Viscosity range	: 10 to 400 cSt
Recommended viscosity	: 32 cSt
Fluid contamination degree:	Class 21/19/16 according to ISO 4406:1999
Electric type	: 24 VDC NO as standard 24/110/220 VAC NO/NC 24/110/220 VDC NO/NC

It is desirable to mount the safety block as close as possible to the accumulator.

Our safety blocks are installed with manual discharge lever which connects the accumulator to the tank. On request we can install electrically operated discharge valves.

Pressure relief valve: The advantage of installing safety block is that the pressure relief valve is inserted in the block and protects the pressure vessel during over pressure. The cartridge pressure relief valve opens the pressure port to the tank port during over pressure. The European Directive recommends installation of pressure relief valves in the hydraulic systems. CE mark is possible for the relief valve.

Ordering Code

1 2 3 4 5 6 7 8 9 10
B - **10** - **M** - **B** - **210** - **G09M** - **G05F** - **P** - **C** - **0**

1	Series	Safety block	= B
2	Size	10mm 20mm 25mm 32mm	= 10 = 20 = 25 = 32
3	Discharge	Only manual Manual and Electric	= M = E
4	Safety valve	Without relief valve, with plastic plug Without relief valve, with metal plug DBDS type relief valve, Factory calibrated DBDS type relief valve, CE Certified With Gas safety valve type VS214 With Gas safety valve type VS224X	= A = T = B = P = V = G
5	Relief Pressure	Relief Valve Set Pressure, in Bar Without Relief Valve	= XXX = 0
6	Accumulator Side Connection	1/2" BSPP(M) for AMW 3/4" BSPP(M) for AS0.7-1.5 AMW 1-1/4" BSPP(M) for AS3-6 2" BSPP(M) for AS10-55 ASWP10-55 ASWD1.5-3 2-1/2" BSPP(M) for AS60-130 ASHF10-55 ASWD4-5 4" BSPP(M) for ASWD10-55 M16x1.5(M) for AMW M18x1.5(M) for AM AMW M22x1.5(M) for AMW M40x1.5(M) for AS3-AS6 M50x1.5(M) for AS10-AS55 Without Nipple Holes for 2" SAE 3000 Flange in B25 B32 Long Adaptor - 3/4" BSPP(M) for AP-100Ø Long Adaptor - 1" BSPP(M) for AP-100Ø 125Ø Long Adaptor - 1-1/4" BSPP(M) for AP-100Ø Long Adaptor - 1-1/2" BSPP(M) for AP-180Ø to 520Ø	= G04M = G05M = G07M = G09M = G10M = G13M = M32M = M33M = M34M = M38M = M41M = W00H = 309H = L05M = L06M = L07M = L08M
7	Installation Side Connection	1/2" BSPP(F) - Standard for B10 3/4" BSPP(F) - Standard for B20 1" BSPP(F) - Standard for B25 1-1/2" BSPP(F) - Standard for B32 2" BSPP(F) Holes for 1-1/4" CETOP-400 (B25 B32) Holes for 1-1/2" CETOP-400 (B32) Holes for 1-1/2" SAE-3000 (B32) Holes for 2" SAE-3000 (B32) Holes for 1-1/4" SAE-6000 (B25 B32) Holes for 1-1/2" SAE-6000 (B32)	= G04F = G05F = G06F = G08F = G09F = C07H = C08H = 308H = 309H = 607H = 608H

Ordering Code

1 2 3 4 5 6 7 8 9 10
B - **10** - **M** - **B** - **210** - **G09M** - **G05F** - **P** - **C** - **0**

8	Seal Material	Nitrile (Buna-N / Perbunan) Low temperature nitrile Hydrogenated nitrile EPDM (Ethylene-Propylene) Butyl Viton (Flouroelastomer)	=P =F =K =E =B =V
9	Block Material	Carbon Steel (-20°C to +150°C) Low Temp. Carbon Steel (-40°C to +150°C) Nickel Coated Carbon Steel (-20°C to +150°C) Stainless Steel(-20°C to +150°C)	=C =L =N =X
10	Other Variants	No variants With Pressure Gauge xxx Bar With Glycerine Filled Pressure Gauge xxx Bar Solenoid Power Supply (Voltage AC/DC NO/NC) With Minimes Coupling With Minimes Coupling in SS	=0 =Gxxx =GGxxx =24D-C =MC =MCX

* Before ordering, check for availability

SEALS-TEMPERATURE-LIQUID COMPATIBILITY

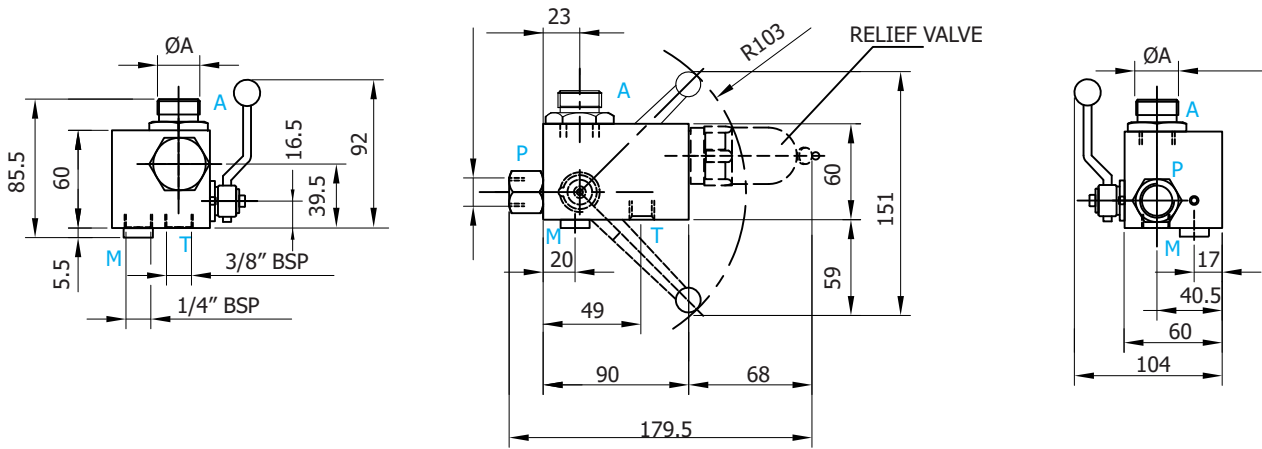
The choice of the elastomer used for the seals depends on the liquid to be used and on the operating temperatures (and at times, storage). In the chart below, each polymer has a designated letter to be used in the ordering code.

Code letter	Polymer	ISO	Temperature range (°C)	Some of the liquids compatible with the polymer
P	Nitrile (Buna-N / Perbunan)	NBR	-20 to +80	Mineral, vegetable, silicon and lubricating oils, industrial water, glycols, non-flammable liquids (HFA-HFB-HFC), aliphatic hydrocarbons, butane, diesel oil, kerosene, fuel oils etc.
F	Low temperature nitrile	NBR	-40 to +70	Same as with standard nitrile + a number of different types of Freon. (This contains less acrylonitrile than standard and is more suitable for low temperatures, but its chemical resistance is slightly lower).
K	Hydrogenated nitrile	HNBR	-30 to +130	The same as with standard nitrile but with excellent performance at high and low temperatures.
E	EPDM (Ethylene-Propylene)	EPDM	-30 to +100	Glycol-based brake fluids, Hot water, leaching fluids, detergents, water-glycol (HFC), many acids and bases, saline solutions, skydrol 7000 etc.
B	Butyl	IIR	-20 to +90	Phosphoric esters (HFD-R), phosphate esters, fyrquel, hot water, ammonia, caustic soda, some kinds of Freon (22-31-502), Glycol-based brake fluids, ketones, esters.
V	Viton (Flouroelastomer)	FKM	-10 to +130	Mineral oils, greases, non-flammable fluids of HFD group, silicone oils, animal and vegetable oils, aliphatic hydrocarbons (gasoline, butane, propane, natural gas), aromatics hydrocarbons (benzene, toluene), chlorinated hydrocarbons (Tetrachloroethylene, carbon tetrachloride), fuels (regular, super and containing methanol), excellent resistance to ozone, weathering and ageing.

* Before ordering, check for availability

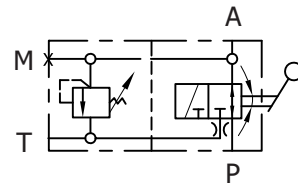
Type : B10

B-10-M-A(B)-...-GxxM-G04F-P-C-0

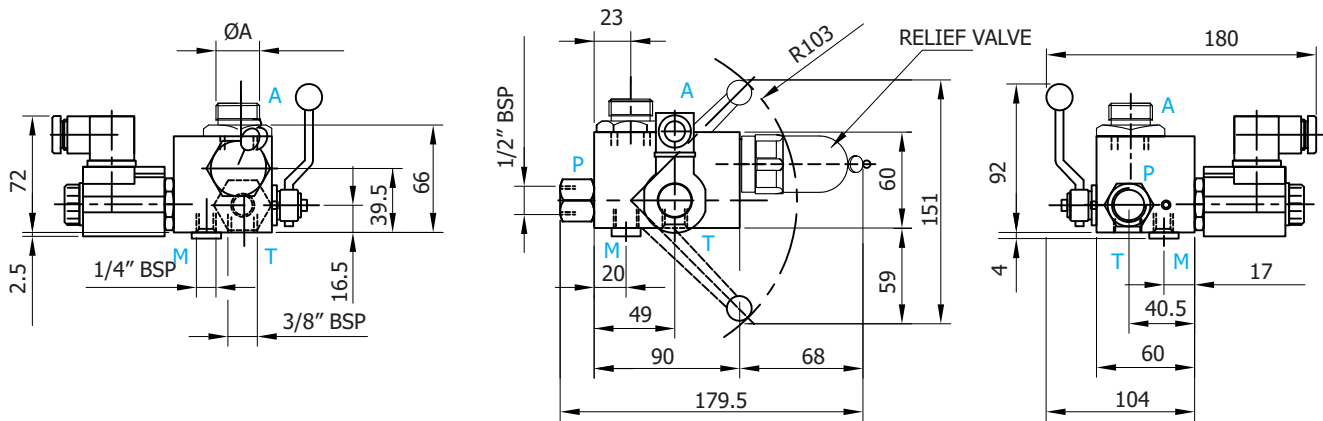


Ordering Code	Conn. ØA	Weight
B-10-M-B-...-G05M-G04F-P-C-0	3/4" BSP	3.2 kg
B-10-M-B-...-G07M-G04F-P-C-0	1-1/4" BSP	3.4 kg
B-10-M-B-...-G09M-G04F-P-C-0	2" BSP	3.5 kg

Symbol

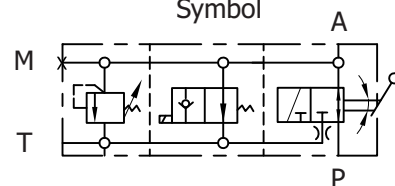


B-10-E-A(B)-...-GxxM-G04F-P-C-0



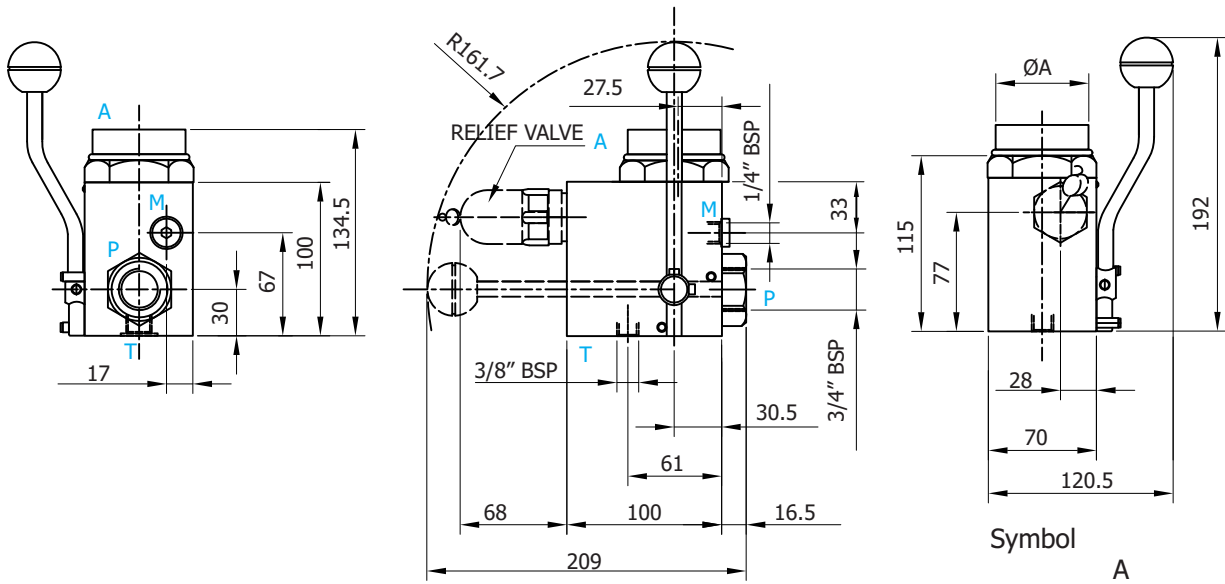
Ordering Code	Conn. ØA	Weight
B-10-E-B-...-G05M-G04F-P-C-0	3/4" BSP	3.4 kg
B-10-E-B-...-G07M-G04F-P-C-0	1-1/4" BSP	3.6 kg
B-10-E-B-...-G09M-G04F-P-C-0	2" BSP	3.7 kg

Symbol

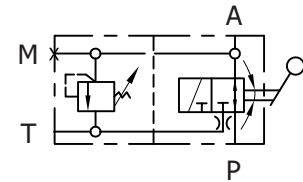


Type : B20

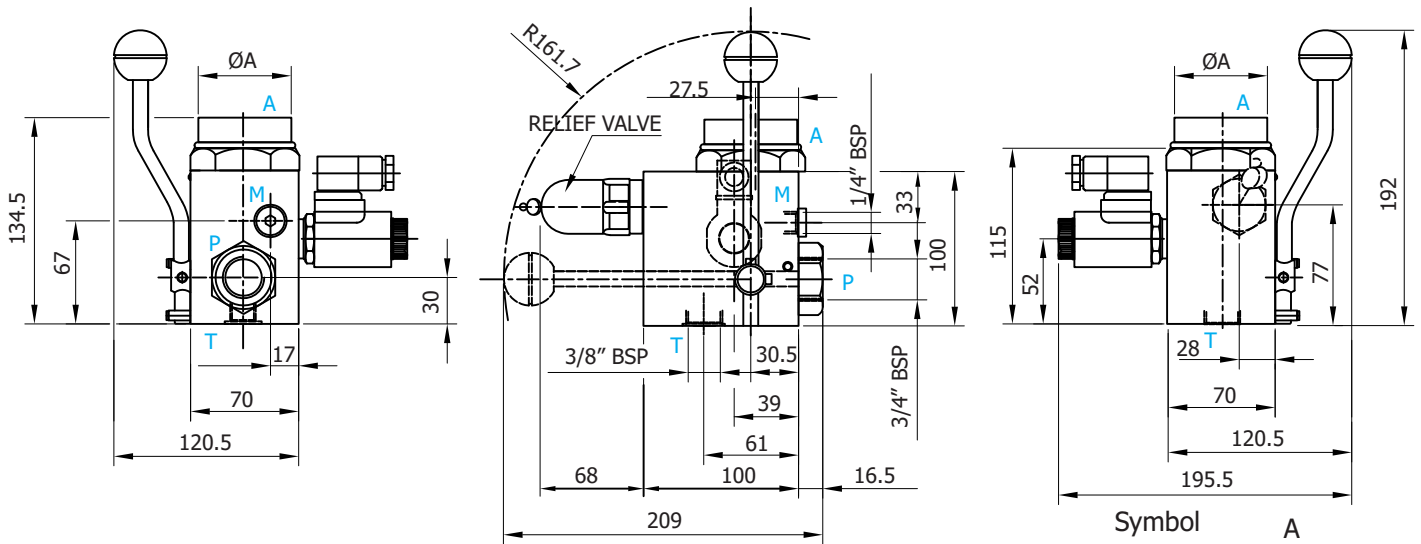
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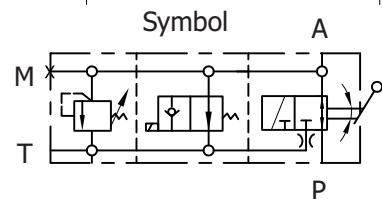
Ordering Code	Conn. ØA	Weight
B-20-M-B-...-G07M-G05F-P-C-0	1-1/4" BSP	6.1 kg
B-20-M-B-...-G09M-G05F-P-C-0	2" BSP	6.7 kg



B-20-E-A(B)-...-GxxM-G05F-P-C-0

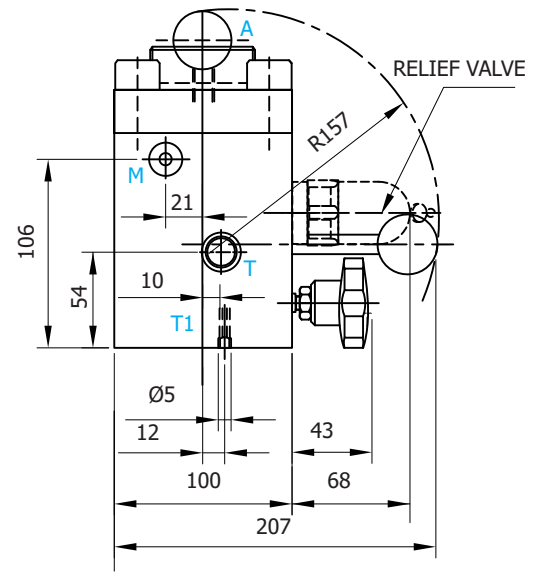
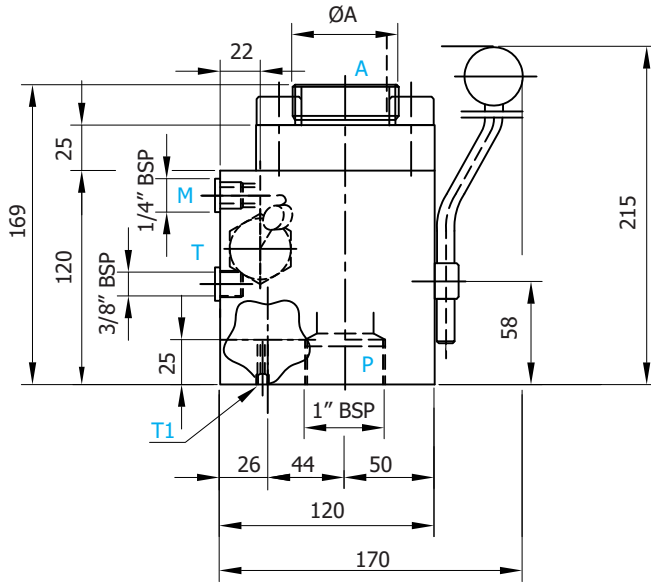


Ordering Code	Conn. ØA	Weight
B-20-E-B-...-G07M-G05F-P-C-0	1-1/4" BSP	6.3 kg
B-20-E-B-...-G09M-G05F-P-C-0	2" BSP	6.9 kg



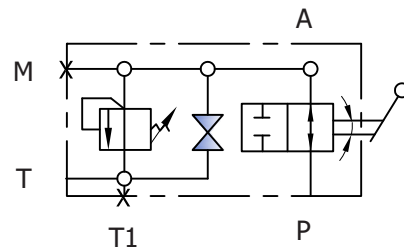
Type : B25

B-25-M-A(B)-...-GxxM-G06F-P-C-0

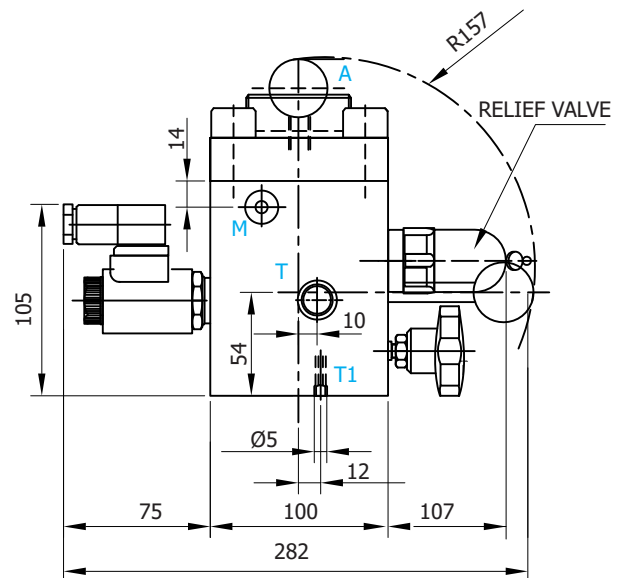
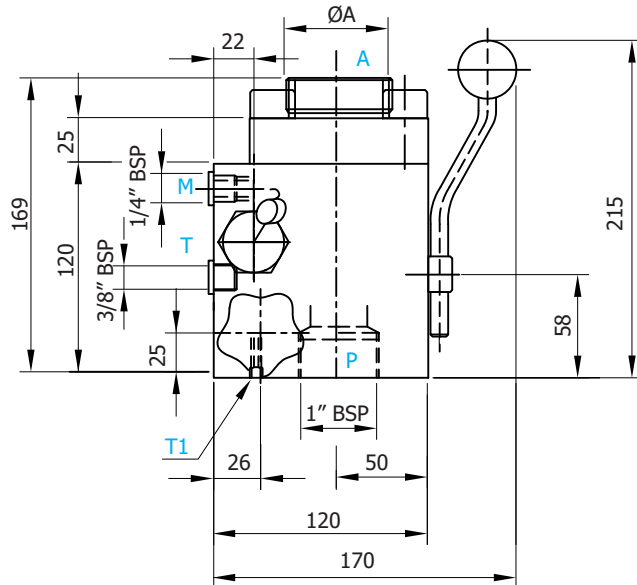


Ordering Code	Conn. ØA	Weight
B-25-M-B-...-G07M-G06F-P-C-0	1-1/4" BSP	12.7 kg
B-25-M-B-...-G09M-G06F-P-C-0	2" BSP	12.9 kg

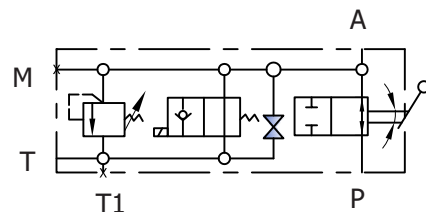
Symbol



B-25-E-A(B)-...-GxxM-G06F-P-C-0



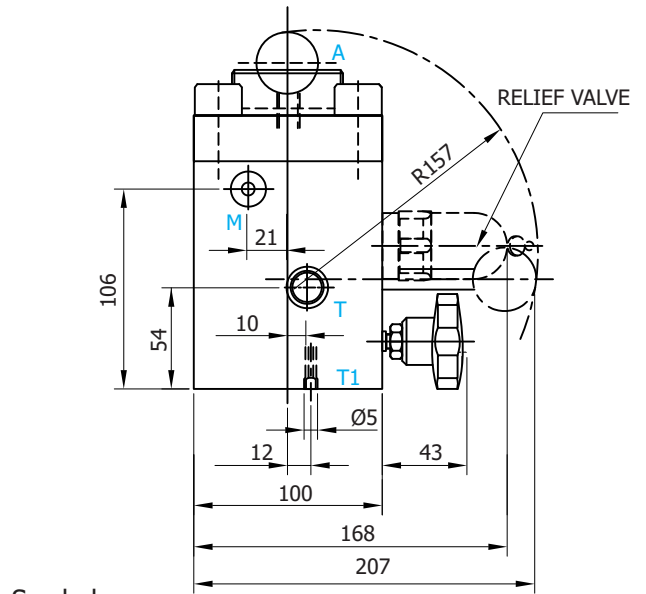
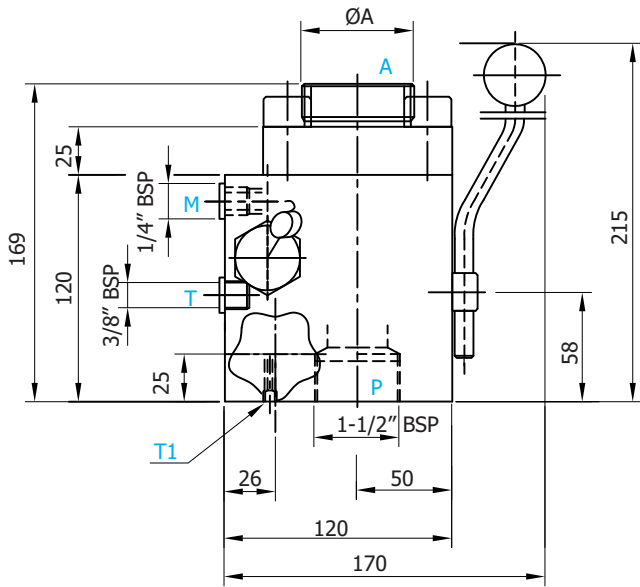
Symbol



Ordering Code	Conn. ØA	Weight
B-25-E-B-...-G07M-G06F-P-C-0	1-1/4" BSP	12.9 kg
B-25-E-B-...-G09M-G06F-P-C-0	2" BSP	13.1 kg

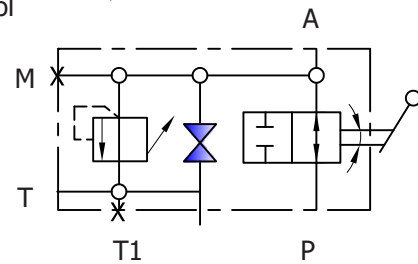
Type : B32

B-32-M-A(B)-...-GxxM-G08F-P-C-0

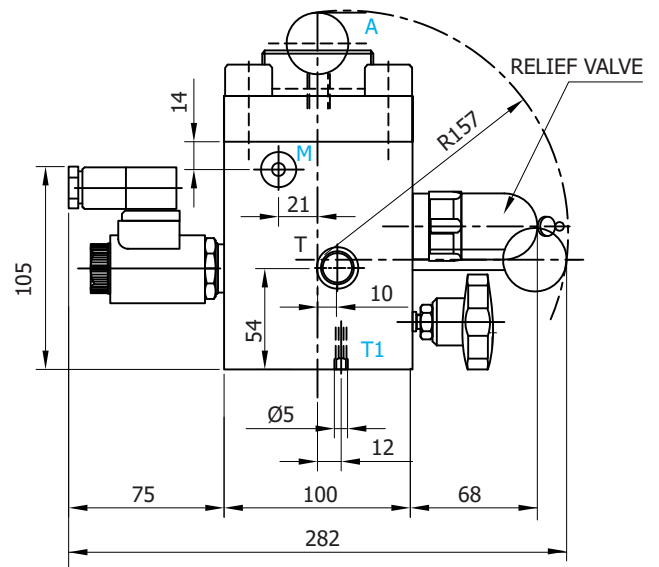
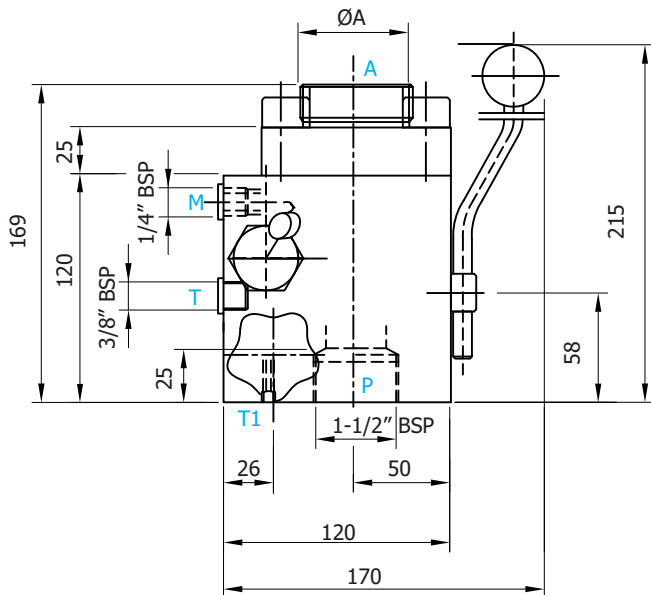


Ordering Code	Conn. ØA	Weight
B-32-M-B-...-G07M-G08F-P-C-0	1-1/4" BSP	12.7 kg
B-32-M-B-...-G09M-G08F-P-C-0	2" BSP	12.9 kg

Symbol

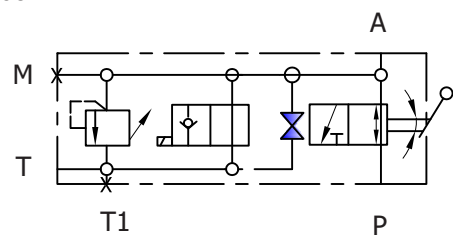


B-32-E-A(B)-...-GxxM-G08F-P-C-0



Ordering Code	Conn. ØA	Weight
B-32-E-B-...-G07M-G08F-P-C-0	1-1/4" BSP	12.9 kg
B-32-E-B-...-G09M-G08F-P-C-0	2" BSP	13.1 kg

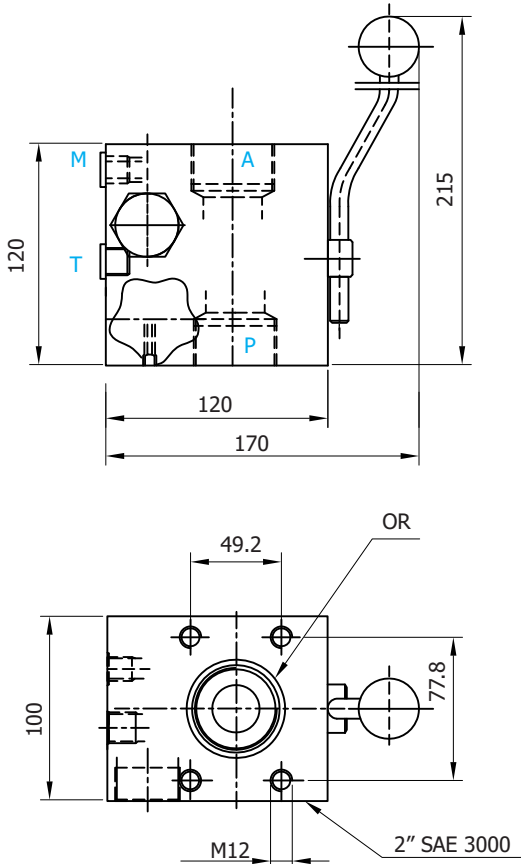
Symbol



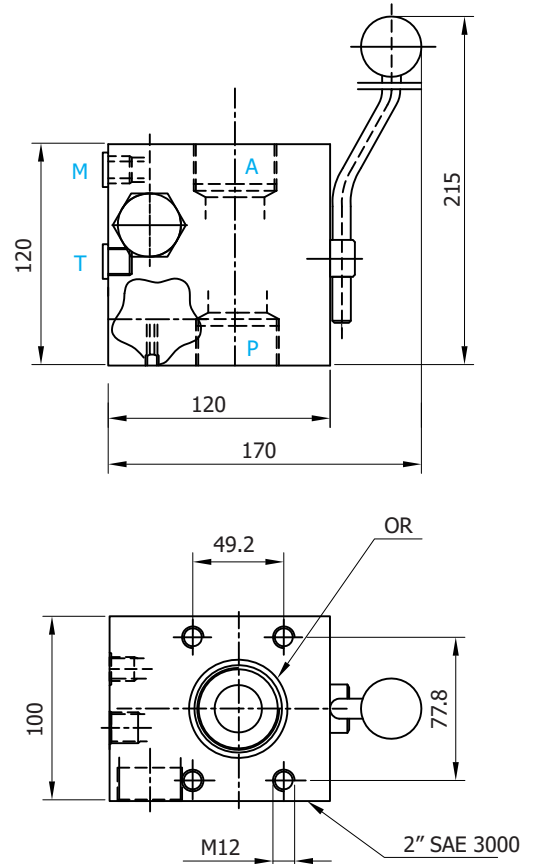
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B-25-M...-309H-G06F-P-C-0

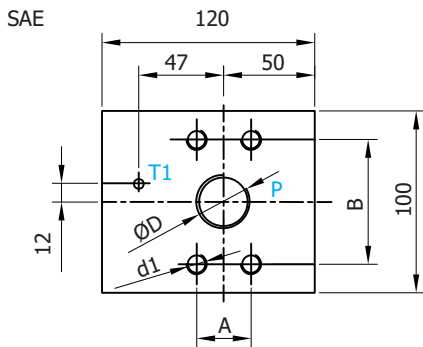
B-32-M...-309H-G08F-P-C-0



Other dimensions as per page 6



Other dimensions as per page 7



Type	For SAE Flange					For CETOP Flange			
	Flange Size	A	B	d1	Thread Depth	Flange Size	C	d2	Thread Depth
B25	1-1/4" SAE 6000	31.6	66.7	M14	24	CETOP 1-1/4"-400	51.6	M12	20
	1-1/4" SAE 6000	31.6	66.7	M14	24	CETOP 1-1/4"-400	60	M12	20
B32	1-1/2" SAE 6000	36.7	79.4	M16	24	CETOP 1-1/4"-400	60	M12	20
	1-1/2" SAE 3000	35.7	70	M12	20	CETOP 1-1/2"-400	60	M14	24
	2" SAE 3000	42.9	77.8	M12	20	CETOP 1-1/2"-400	60	M14	24

On request

All dimensions in mm

